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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,703	06/29/2001	Jeff Zentner	10014498-1	6469

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EXAMINER

CERVETTI, DAVID GARCIA

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/895,703

Applicant(s)

ZENTNER ET AL.

Examiner

David G. Cervetti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2001.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-12 and 14-18 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6,9-12 and 14-18 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 31 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's arguments filed February 28, 2005, have been fully considered but they are not persuasive.

Response to Amendment

2. Examiner approves the amendment to the abstract of the disclosure. The objection to the abstract of the disclosure is withdrawn.

3. The first paragraph of page 11 states that the language previously found in claims 7-8 and 13 is now included in independent claims 1, 10, and 15. Examiner disagrees with this assertion, pointing to the original language of claim 13:

- a. "the device according to claim 10 wherein the controller compares the added key value to a predetermined value to determine if multiple keys have been pressed";
- b. and to the new limitation added to claim 10: "wherein the controller compares the added key **press** value to a predetermined value to determine if multiple keys **in a column** have been **simultaneously** pressed" (emphasis added).

Similar argument applies to claims 1, "a predetermined value to determine if multiple keys have been **simultaneously** pressed", and 15, "comparing the added key value to a predetermined key value to determine if multiple keys have been **simultaneously** pressed" (emphasis added). The original claims do not claim keys being simultaneously pressed.

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4. Examiner submits that Kwon et al. does teach assigning predetermined values to each key, i.e. 0-9, A-F (figures 2, 5A, and 5B). Kwon et al. uses the values on MA, MB to calculate the value MV (column 4, lines 22-42), but it is known in advance that if the 9th key is pressed, the value MV calculated is 9, this value will not change the next time the same key is pressed. Furthermore, Kwon et al. teach comparing the value of keys pressed to a predetermined value (the original value of MA and the original value of MB).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3-6, 9-12, 14-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kwon et al. (US Patent Number: 5,264,845).

Regarding claim 1, Kwon et al. teach a key-pad device comprising: a key-pad including a plurality of keys (column 2, lines 67-68, column 3, lines 1-5); and a key-pad controller providing a key value signal when one of the keys is activated (column 3, lines 1-10), said controller determining which key is activated by a process including a predetermined number of steps (column 3, lines 1-23, column 4, lines 1-42), wherein the process has the same number of steps regardless of which key is activated (column 3, lines 27-59), and wherein each key is assigned a predetermined key press value, said controller adding the key press values when the keys are pressed (column 1, lines 59-62, column 3, lines 1-10, 60-68, figures 2, 5A, and 5B), and wherein the controller compares the added key value to a predetermined value to determine if multiple keys have been simultaneously pressed (column 4, lines 9-66).

Regarding claim 3, Kwon et al. teach wherein the plurality of keys are arranged in a plurality of rows and a plurality of columns (column 2, lines 61-68, column 3, lines 1-5).

Regarding claim 4, Kwon et al. teach wherein the controller determines if more than one key has been activated in more than one column (column 3, lines 42-59, column 4, lines 1-21).

Regarding claim 5, Kwon et al. teach wherein the controller adds a counter value to a counter if a key is activated in a column (column 3, lines 60-68), and wherein the controller determines which column is being monitored for a key activation by a set bit in a digital word (column 3, lines 49-55, column 4, lines 22-42).

Regarding claim 6, Kwon et al. teach wherein the controller determines which key has been activated on a row-by-row basis (column 3, lines 60-68, column 4, lines 22-29, 60-68, column 5, lines 1-12).

Regarding claim 9, Kwon et al. teach wherein the controller subtracts the added key value from a predetermined value to calculate a key value to be transmitted (column 1, lines 59-62, column 3, lines 1-22, column 4, lines 1-29).

Regarding claim 10, Kwon et al. teach a key-pad device for transferring a key value representative of a key press to a terminal, said device comprising: a key-pad including a plurality of keys arranged in a plurality of rows and a plurality of columns (column 2, lines 67-68, column 3, lines 1-5), each key being assigned a key press value (column 1, lines 59-62, column 3, lines 1-10, 60-68, figures 2, 5A, and 5B); and a key-pad controller outputting the key value to the terminal when one of the keys is pressed (column 3, lines 1-10, column 4, lines 22-42), said controller determining the key that is pressed by a process including a predetermined number of steps (column 3, lines 1-23, column 4, lines 1-42), where the number of steps is the same regardless of which key is

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pressed (column 3, lines 27-59), said controller determining if more than one key has been pressed in more than one column (column 4, lines 1-42), and then if only one key has been pressed, determining which key has been pressed on a row-by-row basis by adding the key press values for each key that is pressed (column 1, lines 59-62, column 3, lines 1-10, 60-68, figures 2, 5A, and 5B), wherein the controller compares the added key press value to a predetermined value to determine if multiple keys in a column have been simultaneously pressed (column 4, lines 9-66).

Regarding claim 11, Kwon et al. teach wherein the controller adds a counter value to a counter if a key is pressed in a column (column 3, lines 60-68), and wherein the controller determines that more than one key has been pressed in more than one column (column 3, lines 42-59) if the counter value in the counter is greater than a predetermined value (column 4, lines 9-66).

Regarding claim 12, Kwon et al. teach wherein the controller adds the key press value for each key pressed in a particular row before moving on to a next row (column 3, lines 2-10, column 4, lines 1-66).

Regarding claim 14, Kwon et al. teach wherein the controller subtracts the added key value from a predetermined value to determine the key value to be transmitted to the terminal (column 1, lines 59-62, column 3, lines 1-22, column 4, lines 1-29).

Regarding claim 15, Kwon et al. teach a method for determining which key of a key-pad device having a plurality of keys arranged in a plurality of rows and a plurality of columns has been pressed, comprising: assigning each key a key press value (column 4, lines 30-35); determining if a key has been pressed in one of the columns (column 3,

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lines 60-68, column 4, lines 1-8); advancing a counter by a counter value if a key has been pressed (column 3, lines 60-68, column 4, lines 1-42); determining if a key has been pressed in a next column and adding the counter value to the counter if a key has been pressed, otherwise keeping the counter value the same (column 3, lines 60-68, column 4, lines 1-42); adding the key press value of all of the keys that have been pressed in a first row to generate a first row added key value (column 3, lines 60-68, column 4, lines 1-42); adding the key press value of all of the keys that have been pressed in a second row and adding the added key press values of the second row to the added key value (column 3, lines 60-68, column 4, lines 1-42); determining whether the added key value exceeds a predetermined value (column 1, lines 59-62, column 3, lines 1-10, 60-68, figures 2, 5A, and 5B); transferring the key value from the key-pad device if the added key value does not exceed the predetermined value (column 4, lines 30-42); and comparing the added key value to a predetermined key value to determine if multiple keys have been simultaneously pressed (column 1, lines 59-62, column 3, lines 1-10, 60-68, figures 2, 5A, and 5B).

Regarding claim 16, Kwon et al. teach wherein the key-pad includes four rows and four columns (column 2, lines 65-68, column 3, lines 1-5, 60-68, column 4, lines 1-42), and wherein advancing the counter for each pressed key in each column is performed for all four columns (column 3, lines 8-11), and wherein adding the key press values for all of the keys is performed for all four of the rows (column 3, lines 2-5, 60-68, column 4, lines 1-42).

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Regarding claim 17, Kwon et al. teach subtracting the added key value from a predetermined value to calculate the key value that is transmitted (column 4, lines 67-68, column 5, lines 1-12).

Regarding claim 18, Kwon et al. teach wherein determining if a key has been pressed in one of the columns includes setting a set bit for a particular column if a key has been pressed in that column (column 3, lines 49-55, column 4, lines 1-42).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kwon et al. as applied to claim 1 above, and further in view of De Jesus et al. (US Patent Number: 5,832,206).

Regarding claim 2, Kwon et al. teach the limitations as set forth under claim 1 above. However, Kwon et al. do not disclose expressly the device according to claim 1 further comprising a display and a magnetic strip reader. De Jesus et al. teach the device according to claim 1 further comprising a display and a magnetic strip reader (column 3, lines 50-65). Kwon et al. and De Jesus et al. are analogous art because they are directed to a similar problem solving area, keypad devices. At the time of the invention it would have been obvious to a person of ordinary skill in the art to add a display and a magnetic strip reader to the keypad scan. Therefore, it would have been obvious to a person of ordinary skill in the art to combine the teachings of De Jesus et al. with the method of Kwon et al. for the benefit of keypad devices to obtain the invention as specified in claim 2.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David G. Cervetti whose telephone number is (571) 272-5861. The examiner can normally be reached on Monday-Friday 7:00 am - 5:00 pm, off on Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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